Gabriel Magee

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EDUCATION

B.A. in Computer Science, Minor in Politics   <u>Pomona College</u>

_._ GPA – Class of 2020

Relevant coursework: **Data Structures**, Discrete Math, Computer Systems, **Artificial Intelligence**, **Algorithms**, **Natural Language Processing**, **Computational Creativity**, Linear Algebra, Calculus III, Intro to Macroeconomics, Intro to Microeconomics, and Macroeconomic Theory

LANGUAGES & SKILLS

Java, Python, C, R, Swift, HTML5, CSS, Assembly, LaTeX, CPR, SQL, TensorFlow, PyTorch, JavaScript, Batch, Linux, Bash, Unity, C++, C#, Rust

RELEVANT EXPERIENCE

Research Assistant, *Computer Science Department*   June 2019 – August 2019

IUPUI   <u>Indianapolis, IN</u>

- **Designed**, **trained**, and **deployed** TensorFlow Keras Convolutional Neural Network models into a pipeline that streamed audio from a microphone to a selected model or combination of models on a Raspberry Pi device.
- **Applied statistical analysis** on results to find the optimal combination of different model architectures and data sets and then **wrote** and **submitted** a paper to the 2019 IEEE Big Data Conference.

Undergraduate Intern   June 2018 – Feburary 2019

T-Mobile   <u>Ontario, CA</u>

- **Developed**, implemented and tested the "Special Event Monitoring Tool" to monitor data from cell sites in real-time using **Python**, **SQL** and **Mobatch**.
- Planned and oversaw a **Python** workshop presented to over 100 radio frequency engineers

Teaching Assistant, *Computer Science Department*   August 2017 – Present

Pomona College   <u>Claremont, CA</u>

- Answered questions of students in classes of on a daily basis on Piazza.
- **Facilitated** weekly lab sections to administer instructions and answer questions and guided **mentor sessions** between in *Introduction to Computer Science* or *Artificial Intelligence* 30 to 70 students per semester for **five semesters**
- **Graded** weekly assignments on **accuracy** and **style**, in either **Java** , **Rust**, or **Python**
- **Improved**, updated, and ran the class auto-grader, written in **Python** and **BASH**

ACTIVITIES, AWARDS & OTHER EXPERIENCE

- ***Orientation Adventure Leader***, 2018 and 2019; Welcomed a group of 30 first-years onto campus during a trip to an Orange County beach during orientation, then again the next year at a Beach in Santa Barbara
- ***Senior Organizer***, *Claremont Colleges for Bernie Sanders* 2019; recruited volunteers, ran the Facebook group, tabled outside events and dining halls.
- ***Sponsor***, 2017–2018; Part of Residence Life Program, provided support for and lived with 20 incoming first-years
- ***Eagle Scout***, 2015; Renovated a soup kitchen where I served often for my Eagle Project
- ***Staff Writer***, *Claremont Journal of Law and Public Policy*, 2017- Present; Published articles in a quarterly journal on topics ranging from drug harm reduction to tech policy.
- ***Intern***, *Dustin Stumblingbear for Lawrence City Commission*, 2017; **Designed the website** for the campaign, canvassed over 1,000 homes and analyzed data from voter rolls.

PROJECTS

SmartSketch - *github.com/noyoshi/smart-sketch* Adapted the NVidia SPADE technology to create a web-based tool that turns rough sketches into photorealistic images. Awarded runner-up in the Entertainment column of 2019 HackSC Hackathon out of over 450 participants. The source code for SPADE had only been released from 12 hours before the competition.

Generative Adversarial Networks - *github.com/Maggab1031/Generative-Adversarial-Music-Networks* Built as a project for an **Artifical Intelligence** class using **PyTorch**. It took 15-second samples of audio as a data set, and produced 15-second WAV files as a result.

Genius Lyric Visualization - *github.com/Maggab1031/genius* Uses **Python** to **visualize** lyrical repetition in songs using the Genius.com lyrics database